

III. REMARKS

Claims 1-20 are pending in this application. By this amendment, claims 1, 9, 10, 12, 16 and 19 have been amended herein. Applicants do not acquiesce in the correctness of the rejections and reserve the right to present specific arguments regarding any rejected claims not specifically addressed. Furthermore, Applicants reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application. Reconsideration in view of the following remarks is requested.

Claims 4 and 5 are objected to, but would be allowable if rewritten in independent form. Applicants gratefully acknowledge the indication of allowable subject matter. However, based on the remarks herein, Applicants contend that amending claims 4 and 5 is unnecessary. Note that dependent claims 12 and 19 have been amended to match the limitation found in dependent claim 4.

Claims 1-3, 6-8, 10, 11, 13, 14, 16-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Brodsky (U.S. Patent No. 7,083,436 B2), hereinafter “Brodsky”. Claims 12 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brodsky in view of Shih et al. (U.S. Patent No. 6,286,208 B1), hereinafter “Shih”.

Applicants traverse the rejections for the following reasons. Applicants respectfully submit that all claims are allowable over the cited art because the cited art does not teach all of the claim limitations, as is required under 102(b). For example, Brodsky does not teach “interposer structure having [[]] metallurgical through

connections having a predetermined shape and a **discrete metallurgical core**”.

(Emphasis added) See claim 1, as amended, and similarly claimed in independent claims 10 and 16.

In rejecting claim 1, the Office states the following for supporting disclosure of aspects of the interposer structure from Brodsky:

“[A]n interposer structure 10 having a connection only to the semiconductor chip and to the substrate, wherein the interposer structure includes an elastomeric compliant material having metallurgical 14 through connections having a predetermined shape, wherein the metallurgical through connections form the only connection to the semiconductor hip and to the substrate.” (sic).

Office Action, item 1, page 3.

Even assuming *arguendo* that Brodsky discloses an interposer structure having connections, the type and configuration taught therein are not similar in function, type, and/or configuration found in the claimed invention (e.g., having discrete metallurgical cores).

The portions of Brodsky that discuss how the alleged interposer’s metallurgical connections are formed (see e.g., figures 3 and 4; and, paragraphs at col. 3, lines 40-55; col. 4, lines 34-48) indicate only that conductive interconnect members are formed by suspending spherical and non-spherical conductive particles in an elastomeric thermoplastic material in a molding process. See Abstract. As figures 3 and 4 in Brodsky show, the conductive particles 20, 22 are interspersed and suspended throughout element 18 (i.e., elastomeric material). Further, conductive interconnect member 14 is

made entirely of a uniformly placed elastomeric material 18 that is, not only non-metallurgical, but does not have a discrete core that is metallurgical. “Elastomeric material 18 is packed with conductive particles 20, 22 to approximately fifteen to sixty percent by volume (the “packing ratio”) to achieve the desired conductivity.” (Col. 3, lines 47-50). In sum, while the conductive particles 20, 22 are made of materials such as “silver, gold, carbon, and nickel” (see col. 3, 53-54), there is no discrete metallurgical cores in the metallurgical through connections of the interposer structure taught in Brodsky.

Contrastingly, as figures 1-6 clearly show in the present application, the interposer structure 16 includes discrete metallurgical through connections 18 (fig. 1) that have metallurgical cores. The metallurgical through connections can be embedded or positioned therein the elastomeric compliant material 20. (see ¶[0021], first sentence) The metallurgical through connections 18 may include a “core formed from Copper, Copper-Beryllium, or the like.” (see ¶[0021], last sentence) In other words, the elastomeric compliant material 20 and the metallurgical through connections 18, having metallurgical cores, in the present invention are discrete elements.

What is disclosed in Brodsky cannot amount to a teaching an interposer structure having, *inter alia*, metallurgical through connections having a predetermined shape and discrete metallurgical cores, as in the claimed invention.

In sum, Brodsky does not teach all of the features found in claim 1. Accordingly, Applicants respectfully request withdrawal of the rejection with respect to claim 1.

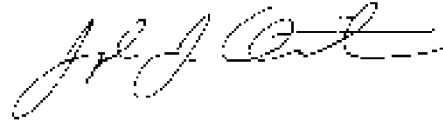
Independent claims 10 and 16 are rejected under the same rationale as claim 1. As a result, Applicants herein incorporate the arguments listed above with respect to claim 1.

With respect to dependent claims 2-9, 11-15 and 17-20, Applicants herein incorporate the arguments presented above with respect to the independent claims from which the claims depend. The dependent claims are believed to be allowable based on the above arguments, as well as for their own additional features.

IV. CONCLUSION

In light of the above remarks, Applicants respectfully submit that all claims are in condition for allowance. Should the Examiner require anything further to place the application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the number listed below.

Respectfully submitted,



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